SEQUENCE LISTING

SEQ ID NO:1

human IRAK-4 amino acid sequence

5 MNKPITPSTYVRCLNVGLIRKLSDFIDPQEGWKKLAVAIKKPSGDDRYNQFHIRRF EALLQTGKSPTSELLFDWGTTNCTAGDLVDLLIQNEFFAPASLLLPDAVPKTANT LPSKEAITVQQKQMPFCDKDRTLMTPVQNLEQSYMPPDSSSPENKSLEVSDTRFH SFSFYELKNVTNNFDERPISVGGNKMGEGGFGVVYKGYVNNTTVAVKKLAAMV DITTEELKQQFDQEIKVMAKCQHENLVELLGFSSDGDDLCLVYVYMPNGSLLDR LSCLDGTPPLSWHMRCKIAQGAANGINFLHENHHIHRDIKSANILLDEAFTAKISD FGLARASEKFAQTVMTSRIVGTTAYMAPEALRGEITPKSDIYSFGVVLLEIITGLPA VDEHREPQLLLDIKEEIEDEEKTIEDYIDKKMNDADSTSVEAMYSVASQCLHEKK NKRPDIKKVQQLLQEMTAS

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SEQ ID NO:2

human IRAK-4 cDNA sequence

ATGAACAAACCCATAACACCATCAACATATGTGCGCTGCCTCAATGTTGGACT AATTAGGAAGCTGTCAGATTTTATTGATCCTCAAGAAGGATGGAAGAAGTTA GCTGTAGCTATTAAAAAACCATCTGGTGATGATAGATACAATCAGTTTCACAT AAGGAGATTTGAAGCATTACTTCAAACTGGAAAAAGTCCCACTTCTGAATTA CTGTTTGACTGGGGCACCACAAATTGCACAGCTGGTGATCTTGTGGATCTTTT GATCCAAAATGAATTTTTTGCTCCTGCGAGTCTTTTGCTCCCAGATGCTGTTCC CAAAACTGCTAATACACTACCTTCTAAAGAAGCTATAACAGTTCAGCAAAAA CAGATGCCTTTCTGTGACAAAGACAGGACATTGATGACACCTGTGCAGAATC TTGAACAAAGCTATATGCCACCTGACTCCTCAAGTCCAGAAAATAAAAGTTT AGAAGTTAGTGATACACGTTTTCACAGTTTTTCATTTTATGAATTGAAGAATG TCACAAATAACTTTGATGAACGACCCATTTCTGTTGGTGGTAATAAAATGGGA GAGGGAGGATTTGGAGTTGTATATAAAGGCTACGTAAATAACACAACTGTGG CAGTGAAGAAGCTTGCAGCAATGGTTGACATTACTACTGAAGAACTGAAACA GCAGTTTGATCAAGAAATAAAAGTAATGGCAAAGTGTCAACATGAAAACTTA GTAGAACTACTTGGTTTCTCAAGTGATGGAGATGACCTCTGCTTAGTATATGT

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SEQ ID NO:3

15 murine IRAK-4 amino acid sequence

MNKPLTPSTYIRNLNVGILRKLSDFIDPQEGWKKLAVAIKKPSGDDRYNQFHIRRF EALLQTGKSPTCELLFDWGTTNCTVGDLVDLLVQIELFAPATLLLPDAVPQTVKS LPPREAATVAQTHGPCQEKDRTSVMPMPKLEHSCEPPDSSSPDNRSVESSDTRFH SFSFHELKSITNNFDEQPASAGGNRMGEGGFGVVYKGCVNNTIVAVKKLGAMVE ISTEELKQQFDQEIKVMATCQHENLVELLGFSSDSDNLCLVYAYMPNGSLLDRLS CLDGTPPLSWHTRCKVAQGTANGIRFLHENHHIHRDIKSANILLDKDFTAKISDFG LARASARLAQTVMTSRIVGTTAYMAPEALRGEITPKSDIYSFGVVLLELITGLAAV DENREPQLLLDIKEEIEDEEKTIEDYTDEKMSDADPASVEAMYSAASQCLHEKKN RRPDIAKVQQLLQEMSA

SEQ ID NO:4

mouse IRAK-4 cDNA sequence

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GAAATTAGCAGTAGCTATCAAAAAGCCGTCCGGCGACGACAGATACAATCAG TTCCATATAAGGAGATTCGAAGCCTTACTTCAGACCGGGAAGAGCCCCACCT GTGAACTGCTGTTTGACTGGGGCACCACGAACTGCACAGTTGGCGACCTTGTG GATCTACTGGTCCAGATTGAGCTGTTTGCCCCCGCCACTCTCCTGCTGCCGGA TGCCGTTCCCCAAACCGTCAAAAGCCTGCCTCCTAGAGAAGCGGCAACAGTG GCACAAACACGGGCCTTGTCAGGAAAAGGACAGGACATCCGTAATGCCTA TGCCGAAGCTAGAACACAGCTGCGAGCCACCGGACTCCTCAAGCCCAGACAA CAGAAGTGTAGAGTCCAGCGACACTCGGTTCCACAGCTTCTCGTTCCATGAAC TGAAGAGCATCACAAACAACTTCGACGAGCAACCCGCGTCTGCCGGTGGCAA ${\tt CCGGATGGGAGAGGGGGATTTGGAGTGTGTACAAGGGCTGTGTGAACAAC}$ ACCATCGTGGCGGTGAAGAAGCTCGGAGCGATGGTTGAAATCAGTACTGAAG AACTAAAGCAACAGTTTGATCAAGAAATTAAAGTAATGGCAACGTGTCAGCA CGAGAACCTGGTGGAGCTGCTCGGCTTCTCCAGCGACAGCGACAACCTGTGC TTAGTGTATGCTTACATGCCCAACGGGTCCTTGCTGGACAGACTGTCCTGCCT GGATGGTACACCACCGCTTTCCTGGCACACAAGGTGCAAGGTTGCTCAGGGG ACAGCAAATGGCATCAGGTTTCTGCATGAAAATCATCACATTCATAGAGATA TTAAAAGTGCAAATATCTTACTAGACAAAGACTTTACTGCCAAAATATCTGAC ${\tt TTTGGGCTTGCACGGGCTTCGGCAAGGCTAGCGCAGACGGTCATGACCAGCC}$ GAATCGTGGGCACAACGCTTACATGGCACCCGAAGCTTTGCGGGGAGAAAT AACACCCAAATCTGACATCTACAGCTTCGGCGTGGTTCTGTTGGAGCTGATAA CCGGGCTGCGGCTGTGGATGAAAACCGTGAACCTCAACTACTGCTGGATAT TAAAGAAGAGATTGAAGATGAAGAGAGAGACGATTGAAGATTACACGGATGA GAAGATGAGCGATGCGGACCCTGCTTCGGTGGAAGCAATGTACTCTGCTGCT AGCCAGTGTCTGCATGAGAAGAAAAACAGACGGCCAGACATTGCAAAGGTTC AACAGCTGCTACAAGAGATGTCTGCTTAA

SEQ ID NO:5

Sense primer for amplification of human IRAK-4

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ATGAACAAACCCATAACACCATCAACATATGTGC

SEQ ID NO:6

Antisense primer for amplification of human IRAK-4

TTAAGAAGCTGTCATCTCTTGCAGC